California Education and the Environment Initiative

Increasing Environmental Literacy for K–12 Students... Because the Future is in Their Hands



TEACH COMMON CORE STANDARDS WITH THE EEI CURRICULUM

Created with your needs in mind, this document shows the correlation between the EEI Curriculum and the California Common Core State Standards. By teaching the EEI unit lessons in your classroom, you will be simultaneously addressing the Common Core standards depicted in this quide.

6.2.2.— Agricultural Advances in Ancient Civilizations



In this unit, students learn about the earliest subsistence farms in the ancient world through two great civilizations: Egypt and Mesopotamia. These societies were able to efficiently use the goods and services from their respective ecosystems. By studying the past, students learn the importance of natural system cycles to the development of political and economical structures. Throughout the unit, students draw parallels between ancient and modern times with the use of natural resources, the development of agricultural tools, and arable land use. Students learn the significance of agriculture in California and the potential created by combining human ingenuity with available natural resources. At the same time, they learn of other influences that affect the land, such as population and salinity. Though the unit focuses on ancient people, the problem-solving and critical-thinking skills practiced throughout this lesson help students understand human reliance on natural resources in the present day.

		RI.6.1 and RH.6–8.1	RI.6.2 and RH.6–8.2	RI.6.4 and RH.6–8.4	RI.6.5 and RH.6–8.5	RI.6.7 and RH.6–8.7	RI.6.8 and RH.6–8.8	W.6.1 and WHST.6-8.1	W.6.2 and WHST.6–8.2	W.6.4 and WHST.6–8.4	W.6.7 and WHST.6–8.7	W.6.9 and WHST.6–8.9	W.6.10 and WHST.6–8.1	SL.6.1	SL.6.2	SL.6.4	L.6.4
	California Connections	✓	1	1	/	1	1		1							1	
	1	√	√	1										1			✓
N S	2	√		1		1				✓		✓	✓	✓	1	1	1
S S O	3			1		1			1	1				1	1	1	1
LE	4			1		1			1					1		1	1
	5	✓		1									1	1			1
	Traditional Assessment	√							1	1		1					
	Alternative Assessment	√				1		1			1	1				1	

COMMON CORE STANDARDS

Note: For your reference, the list of California Common Core State Standards abbreviations is on the following page.

Using the EEI-Common Core Correlation Matrix

The matrix on the front page identifies a number of Common Core standards that are supported by this EEI unit. However, the check marks in the matrix do not necessarily signify that the Common Core standards checked will be taught to mastery by using this EEI unit alone. Teachers are encouraged to select which Common Core standards they wish to emphasize, rather than teaching to every indicated standard. By spending more time on selected standards, students will move toward greater Common Core proficiency in comprehension, critical thinking and making reasoned arguments from evidence. Teaching this EEI unit will provide opportunities for teachers to implement the shift in instructional practice necessary for full Common Core implementation.

California Common Core State Standards Abbreviations

- CCCSS: California Common Core State Standards
- L: Language Standards
- RH: Reading Standards for Literacy in History/Social Studies
- RI: Reading Standards for Informational Text
- SL: Speaking and Listening Standards
- W: Writing Standards
- WHST: Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects

Note: Since each Common Core standard includes a breadth of skills, in this correlation, the portion of the standard description that is featured in the Common Core standards applications is cited, using "..." to indicate omitted phrases. For a list of the complete standard descriptions, please see the Common Core Reference Pages located on pages 15–17 of this document.

Note for Sixth Grade Units: English Language Arts Standards and their corresponding Literacy Standards are combined in the matrix on page 1 and in each lesson table. The verbiage from the standard that most specifically matches the activity is used to represent both standards, since usually both differ only slightly. Where the standards have significant differences in how they apply to the lesson activity, they are listed separately.

A Note about Common Core Speaking and Listening Standards

Throughout this unit, students participate in various learning structures and groups to analyze, discuss, and synthesize data, which supports the skill in Speaking and Listening Standard 1 "Participate effectively in a range of collaborative discussions (one-on-one, groups...) with diverse partners." With prior instruction on collaborative discussions, these various groupings and the materials students examine lend themselves to prime discussion material for collaborative discussions. Learning structures with tasks for pairs and groups are in the following lessons:

- **Lesson 1:** Whole class
- Lesson 2: Whole class, partners, and groups of 4
- Lesson 3: Whole class, then 2 groups
- **Lesson 4:** Whole class, then actors for a play
- Lesson 5: Whole class

National Geographic Resources

■ View from Space wall map (Lessons 1 and 5)

Unit Assessment Options

Assessments	Common Core Standards Applications		
Traditional Assessment			
Students answer multiple choice and short answer questions about the agricultural advances in ancient civilizations.	RI.6.1 and RH.6–8.1 : Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.		
	W.6.2 and WHST.6–8.2: Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.		
	W.6.4 and WHST.6–8.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.		
	W.6.9 and WHST.6–8.9: Draw evidence from literary or informational texts to support analysis, reflection, and research.		
Alternative Assessment			
In this assignment titled "Cities Grow From Agriculture," students complete a chart by reading about five events or situations and numbering them in chronological order. Then they give two examples of each event or situation, and end by	RI.6.1 and RH.6–8.1: Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. RI.6.7 and RH.6–8.7: Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.		
illustrating of one of the two examples. Suggestion: For Common Core enhancement, copy students'			
final project to correct, and then have them use the original to meet in small groups to orally discuss their examples of each event. Have them mark any changes they wish to make based on discussion with their group.	SL.6.4: Present claims and findings sequencing ideas logically and using pertinent descriptions, facts, and details; use appropriate eye contact, adequate volume, and clear pronunciation.		
	W.6.1 and WHST.6–8.1 : Write arguments to support claims with clear reasons and relevant evidence.		
	W.6.7 and WHST.6–8.7: Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.		
	W.6.9 and WHST.6–8.9: Draw evidence from literary or informational texts to support analysis, reflection, and research.		

Lesson 1: The Power of Agriculture

Students read about the relationship between California's political and economic power and the growth of agriculture in the state. They engage in a class discussion in which they draw parallels between the story of agriculture in California and the rise of ancient civilizations in the Fertile Crescent.



National Geographic Resources

■ View from Space wall map

Use this correlation in conjunction with the **Procedures** located on pages 34–35 of the Teacher's Edition. Only procedure steps with a Common Core correlation are included in the table below.

Student Tasks	Common Core Standards Applications
Vocabulary Development: For depth of understanding, vocabulary may be featured within the context of the unit instead of or in addition to the beginning of	L.6.4c: Consult reference materials todetermine[a word's] meaning
the lesson. Tip: If Dictionary Workbooks need to be reused from year to year, students should not write in them.	RI.6.4 and RH.6-8.4: Determine the meaning of words and phrases as they are used in a text
Step 1: Begin with a class discussion asking students if they have ever seen fields in California where people grow plants to use as food. Then have students pair-share what they think plants need in order to survive. (Be sure to mention water if they do not.) Let them know that when plants are grown for people to eat or use for other purposes this is called "agriculture." Pair-share again, having the students name some of the major food crops grown here in California (rice, tomatoes, nuts, grapes, citrus).	SL.6.1: Engage effectively in a range of collaborative discussions (one-onone, in groups, and teacher-led) with diverse partners on <i>grade 6 topics, texts, and issues,</i> building on others' ideas and expressing their own clearly.
Steps 3 and 4: Students read (whole class or with another student) <i>California</i> Connections: The Great Central Valley's Rise to Power (Student Edition, pages 2–5). After reading, project Focus Questions (Visual Aid #1) and use the questions to discuss what they just read again, either as whole class or pair-share.	RI.6.1 and RH.6–8.1: Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
Suggestion: Refer to the Reading California Connections using a Common Core Reading and Writing Focus on pages 10 to view specific suggestions for integrating Common Core standards while reading this selection not only for content, but for text structure as well.	RI.6.2 and RH.6–8.2: Determine the central ideas or conclusions of a text; provide an accurate summary of the text
Suggestion: In addition to discussing the questions in the Procedures for this step, have students summarize the main idea and supporting points of the text, either individually or with a partner.	SL.6.1: Engage effectively in a range of collaborative discussions (one-onone, in groups, and teacher-led) with diverse partners on <i>grade 6 topics, texts, and issues,</i> building on others' ideas and expressing their own clearly.

Student Tasks Common Core Standards Applications Steps 3 and 4 (Continued): RI.6.1 and RH.6-8.1: Cite textual evidence to support analysis of what the **Tip:** If **Student Workbooks** need to be reused from year to year, students should not text says explicitly as well as inferences write in them. Some strategies teachers use to preserve the workbooks are: drawn from the text. ■ Have students use binder paper or other lined or unlined paper. RI.6.2 and RH.6-8.2: Determine the ■ Have students use a sheet protector over the page and write with a central ideas or conclusions of a text; whiteboard marker. provide an accurate summary of the text... ■ Do together as a class on a projector or chart paper. **SL.6.1:** Engage effectively in a range ■ Project the digital fill-in version and do together as a class. of collaborative discussions (one-on-■ Students use digital devices to fill in the digital version found on the website. one, in groups, and teacher-led) with ■ Make student copies when necessary. diverse partners on grade 6 topics, texts, and issues, building on others' ideas and **Tip:** To preserve the colored workbooks for use each year, use any of these strategies: expressing their own clearly. ■ Make black and white copies for students to write on while looking at the color copy. ■ Use a sheet protector over the color copy. ■ Laminate the color photos and cut into strips that students place over their black and white copy. ■ Do together as a class with the teacher holding the page and writing on a sheet protector.

■ Project it using a document reader or LCD projector.

Lesson 2: Radical Revolution: Ancient Agricultural Advancements

Students become archeologists and uncover artifacts buried in the middens (or garbage heap) of ancient farmers. They analyze the objects and connect each one to increased agricultural output. They begin to trace the path from agriculture to the emergence of cities.



Use this correlation in conjunction with the **Procedures** located on pages 44–45 of the Teacher's Edition. Only procedure steps with a Common Core correlation are included in the table below.

Student Tasks	Common Core Standards Applications		
Vocabulary Development: For depth of understanding, vocabulary may be featured within the context of the unit instead of or in addition to the beginning of the lesson.	L.6.4c: Consult reference materials todetermine[a word's] meaning RI.6.4: and RH.6–8.4: Determine the meaning of words and phrases as they are used in a text		
Step 2: In pairs, have students read The Beginnings of Agriculture (one student taking Mesopotamia , the other Ancient Egypt) (Student Edition, pages 6–9). After reading, have students summarize what they read for their partner.	SL.6.1: Engage effectively in a range of collaborative discussions (in groups) building on others' ideas and expressing their own clearly.		
Steps 4 and 5: Form groups of 4, then have students turn to Ancient Middens (Student Workbook, pages 3–4) where they will fill in the chart using the Midden Packet (Information Cards #1–7) given to each group. Students will be exploring an ancient "midden" (or garbage heap!) by studying the information card, reading the	RI.6.1 and RH.6–8.1: Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.		
description on the back, and filling in their charts. Once completed, have groups share their results.	RI.6.7 and RH.6–8.7 : Integrate information presented in different medior formatsto develop a coherent understanding of a topic or issue.		
	SL.6.1: Engage effectively in a range of collaborative discussions		
	SL.6.2: Interpret information presented in diverse media and formatsand explain how it contributes to a topic, text, or issue under study.		
	SL.6.4: Present claims and findings using pertinent descriptions, facts, and details and nonverbal elements ; use appropriate eye contact, adequate volume, and clear pronunciation.		
	W.6.4 and WHST.6–8.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.		
	W.6.9 and WHST.6–8.9: Draw evidence from literary or informational texts		
	W.6.10 and WHST.6–8.10: Write routinely overshorter time frames for a range oftasks, purposes, and audiences.		

Lesson 3: Subsistence to Surplus

Students analyze data and create graphs to illustrate that early farmers needed to increase the size of their farms and use more resources in order to increase agricultural production. They continue to trace the path from agriculture to the emergence of cities.

Suggestion: This lesson offers various graphing opportunities for students which correlate with California Common Core State Standards for math as well.



Use this correlation in conjunction with the **Procedures** located on pages 68–69 of the Teacher's Edition. Only procedure steps with a Common Core correlation are included in the table below.

Student Tasks	Common Core Standards Applications		
Vocabulary Development: For depth of understanding, vocabulary may be featured within the context of the unit instead of or in addition to the beginning of	L.6.4c: Consult reference materials todetermine[a word's] meaning		
the lesson.	RI.6.4 and RH.6–8.4: Determine the meaning of words and phrases as they are used in a text		
Steps 3–6: First students view Map of Egypt (Visual Aid #2), drawing their attention to the Nile River system, and specifically the Nile River Delta. Let them know that records from Ancient Egypt provide a good example of how the growth of	RI.6.7 and RH.6–8.7: Integrate information presented in different media or formats		
agriculture affected the lands in and around Egypt, and now they must interpret some themselves. Divide the class in half, and inform them they will be representing wheat and cattle, two products for which Egypt was famous in the ancient world. With a recorder in each group writing answers with a marking pen on chart paper, have the students come up with all the natural resources needed to grow or raise	SL.6.1: Engage effectively in a range of collaborative discussionsbuilding on others' ideas and expressing their own clearly.		
their product (allow 5 to 7 minutes). When time is up, have them post their results and debrief the two lists.	SL.6.2: Interpret information presented in diverse media and formatsand explain how it contributes to a topic		
Have the cattle ranchers turn to Summing the Cattle Surplus (Student Workbook, pages 11–12) and the wheat farmers to Summing the Wheat Surplus (Student Workbook, pages 9–10) and complete the graphs using the information provided. Once the graphs are completed, debrief with the questions provided in the Procedures (Teacher's Edition, page 69). Go over with students the two charts Population in Ancient Egypt and Crop Yield in Ancient Egypt (Student	SL.6.4: Present claims and findings using pertinent descriptions, facts, and details and nonverbal elements; use appropriate eye contact, adequate volume, and clear pronunciation.		
Workbook, pages 13–14). The final step has the entire class create two graphs for Graphing the Crops and Crowds .	W.6.2 and WHST.6–8.2: Write informative/explanatory texts to		
Tip: Students will need blank paper and rulers to complete these final two graphs.	examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.		
	W.6.4 and WHST.6–8.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.		

Lesson 4: Crowding Out the Crops

Students identify the main urban areas in ancient Mesopotamia and Egypt on maps. They then participate in a simulation in which they take on the roles of ancient peoples in these civilizations to experience the effects of population growth. To conclude, they complete a chart showing how communities evolved from subsistence to cities.



Use this correlation in conjunction with the **Procedures** located on pages 90–91 of the Teacher's Edition. Only procedure steps with a Common Core correlation are included in the table below.

Student Tasks	Common Core Standards Applications			
Vocabulary Development: For depth of understanding, vocabulary may be featured within the context of the unit instead of or in addition to the beginning of	L.6.4c: Consult reference materials todetermine[a word's] meaning			
the lesson.	RI.6.4 and RH.6–8.4 : Determine the meaning of words and phrases as they are used in a text			
Step 1: Students will have a group discussion about where they live and where their school is located, and they'll think about why places were built where they have are and how they grown over time. The discussion into the food and other products needed to live in this area. Ask if they are all produced in the same location, and	SL.6.1: Engage effectively in a range of collaborative discussionsin groups building on others' ideas and expressing their own clearly.			
question why some things are not produced in the location in which we live. Let students know that we are now going to trace the development of the world's first cities, looking at the agricultural techniques, economic surplus, and how these cities became centers of culture and power.	c) Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.			
	d) Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.			
Steps 4 and 5: Students get moving as they act out a script read to them. Have a stage area available and distribute one of the Crowding Out the Crops Role Cards (Teacher's Masters, pages 2–4) to each student. The script is read aloud (Teacher's	RI.6.4 and RH.6-8.4: Determine the meaning of words and phrases as they are used in a text			
Edition, pages 92–93) and the students "act out" their role. Once the script reading is complete, have students turn to From Subsistence to Cities (Student Workbook, pages 15–16) and through group discussion, complete the chart together.	RI.6.7 and RH.6–8.7: Integrate information presented in different media or formatsto develop coherent understanding of a topic or issue.			
	SL.6.4: Present claims and findings use appropriate eye contact, adequate volume, and clear pronunciation.			
	W.6.2 and WHST.6-8.2: Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information			
	d) Use precise language and domain- specific vocabulary to inform about or explain the topic.			

Lesson 5: Sinking Civilizations

Students view a presentation to uncover the primary reason for the decrease in arable land in Mesopotamia. They discover the salinization occurring today in the Great Central Valley and contemplate the future effect of such a change on the population and economy of California.



National Geographic Resources

■ View from Space wall map

Use this correlation in conjunction with the **Procedures** located on pages 108–109 of the Teacher's Edition. Only procedure steps with a Common Core correlation are included in the table below.

Student Tasks	Common Core Standards Applications			
Vocabulary Development: For depth of understanding, vocabulary may be featured within the context of the unit instead of or in addition to the beginning of	L.6.4c: Consult reference materials todetermine[a word's] meaning			
the lesson.	RI.6.4 and RH.6–8.4: Determine the meaning of words and phrases as they are used in a text			
Steps 2–5: Have students turn to CSI: Crop Science Investigation (Student Workbook, pages 17–19), where they will take notes on a presentation that gives clues to Mesopotamia's decline. Let students know that they will use these notes to create a Venn diagram comparing Mesopotamia and the San Joaquin Valley, and	RI.6.1 and RH.6–8.1: Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.			
then write brief answers to questions on agriculture of ancient times and today. Present Changes in the Fertile Crescent (Visual Aids #10–28) by showing the cards and reading the information on each card.	SL.6.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups)			
Note: Having random students read the cards may help keep the interest of the entire class. After the cards have been read, use the discussion questions in the Procedures (Teacher's Edition , Step 4, page 108). Then have students turn to page 18 of the	c) Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.			
Student Workbook and complete the Venn diagram using the notes they created from the presentation.	d) Review the key ideas expressed and demonstrate understanding			
Note: The next assignment was suggested to do for homework, but could be done with a small group or partner in class instead.	of multiple perspectives through reflection and paraphrasing.			
Once the Venn diagram is complete, have students answer the questions on page 19 in the Student Workbook .	W.6.10 and WHST.6–8.10: Write routinely overshorter time frames for a range oftasks, purposes, and audiences.			

Unit Assessment

Refer to the introduction pages at the front of this document for information regarding the Traditional and Alternative Assessments for this unit and their Common Core correlations.

Reading California Connections using a Common Core Reading and Writing Focus

Reading

History teachers can further enhance the teaching of Common Core Reading Literacy Standards by noting the suggestions below and in the following pages while reading the *California Connections* selection for content. Explicitly teach students to pay attention to the structure of the text by noting the following:

- Note how the author cites evidence to support main points and analysis. (RH.6-8.1)
- Note how the author sets up the central ideas or information; and provide an accurate summary of the text distinct from prior knowledge or opinions. (RH.6-8.2)
- Identify key steps in a text's description of a process related to history. (RH.6-8.3)
- Note how the author explains the meaning of key words, phrases, and vocabulary related to history-social studies. (RH.6–8.4)
- Analyze the structure the author uses to organize the text; describe how a text presents information (e.g., sequentially, comparatively, causally). (RH.6-8.5)
- Analyze the author's point of view and purpose, including watching for loaded language and inclusion or avoidance of particular facts. (RH.6-8.6)
- Note how the information in the *California Connections* text integrates with information provided throughout the unit in diverse formats, including charts, graphs, photographs, videos, or maps. (RH.6-8.7)
- Distinguish among fact, opinion, and reasoned judgment in a text. (RH.6-8.8)
- Analyze the relationship between a primary and secondary source on the same topic. (RH.6-8.9)
- Note comprehension strategies for understanding text. (RH.6-8.10)

Note: Standard descriptions from the Reading Standards for Literacy in History/Social Studies are paraphrased and combined, using terminology that applies to reading a California Connections selection.)

Writing

Many **California Connections** selections can be used as a model for future student writing tasks applying the Writing Literacy Standards by noting how the author structures the text, organizes the ideas, and provides well-chosen relevant and sufficient facts, extended definitions, concrete details, quotations, or other information and examples.

Using the California Connections Selection

The following pages note specific places where the *California Connections* selection provides examples for specific Writing Literacy Standards, using this selection as a writing model. They also provide suggestions for teaching students to analyze text structure using the Reading Literacy Standards. Teachers can incorporate more suggestions from the list above.

California Connections and Common Core

RI.6.2 and RH.6-8.2: Determine a central

idea of a text and how

it is conveyed through

distinct from personal

opinions or judgments.

Suggestion: During the

reading of the selection,

have students keep a T

chart with the central

by details that support

the chart to complete a

summary at the end of

the reading.

ideas on the left followed

idea on the right. Then use

particular details; provide summary of the text

RI.6.1 and RH.6-8.1: Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

Suggestion: Throughout the selection, have students cite evidence that supports what it says explicitly as well as explaining inferences that can be drawn. Have students explain the details that work together to create inferences.

> California Connections: The Great Central Valley's Rise to Power Lesson 1 | page 1 of 4

The Great Central Valley's Rise to Power



Most people would describe California by its popular tourist attractions. The list might include Malibu, Hollywood, Yosemite, or the Golden Gate Bridge, Other people would name the Silicon Valley, where the personal computer

Few people would think of the farms of the Great Central Valley. Yet, over half of the people in the United States eat its food every day. People worldwide buy fruit, grains, and meat grown and raised in the soil of this natural wonder. The farms of the Central Valley generate fifty-five percent of the crops produced by California. It is considered one of the Earth's most valuable agricultural regions. In fact, if California were its own country, it would be one of the richest countries in the world—and much of that wealth comes from what is grown on our farms.

More than 350 crops are raised here. Fruits and nuts are the largest crops produced, followed by vegetables, livestock, field



crops (such as rice and cotton), and dairy products. Although dairy products are the fifth-largest crop in the state, California dairy ranks first in the nation. Similarly, California cotton ranks fourth in the United States.

Agriculture in California supports many families and

communities. One out of every ten jobs here is tied to agriculture. For example, grocery stores, restaurants. and the building and selling of farming equipment all provide iobs for Californians, Every year, farmers in the state earn about 20 billion dollars. Since 1947, California has been first RI.6.7 and RH.6-8.7: Integrate information presented in different media or formats... to develop coherent understanding of a topic or issue.

Suggestion: Ask students if this is a crop or garden and give evidence to support their answer.

RI.6.4 and RH.6-8.4: Determine the meaning of words and phrases as they are used in a text...

Suggestion: Have students highlight vocabulary words and use another color to highlight adjectives describing the word.

RI.6.7 and RH.6-8.7: Integrate information presented in different media or formats... to develop coherent understanding of a topic or issue.

Suggestion: Have students find where they live on the map. Then take note of the water sources that run through the valley.

RI.6.8 and RH.6-8.8:

Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not.

Suggestion: Determine through text if drought is negative or positive to the Central Valley.

California Connections: The Great Central Valley's Rise to Power Lesson 1 | page 2 of 4



California's San Joaquin Valley

in the nation for agriculture, and our farms feed more people than any other state. It is no surprise that of the top 10 U.S. farming counties, nine are in the Great Central Valley.

The Right Balance

Central Valley farmers have the perfect blend of natural resources. California's mild weather brings a long

growing season. Rich, fertile soil lines the valley floor Rivers flow down from the mountain ranges in the north and east. Dams and canals on these rivers provide a steady water supply to farms in the Central Valley.

But it was not always this way. Although the natural resources of the Central Valley were used for thousands of

years by Paleolithic peoples, American Indians, Spanish missionaries, early Mexican and U.S. settlers, and Gold Rush immigrants, when it came time to create the modern farms of the Central Valley, there were a few problems

For example, consider the 430-mile stretch of fertile farmland found in the Central Valley. The southern end did not always have enough water for its crops. But at the northern end, rivers often flooded the towns and fields when the snows melted in the mountains. The flooding problem in the north was solved as levees and dams were built to control the floodwaters. Farming boomed! In 1900, the Central Valley had 73,000 farms. Thirty-five years later, 150,000 farms dotted the valley.

Over time, new problems arose. Some of the levees broke during the floods. Drought hit other parts of the Central Valley. Crops began to wither and die. Though many people became discouraged. not everyone gave up. Some people believed answers could be found. They kept asking the right questions and finding solutions.

W.6.2c and WHST.6-8.2:

Use appropriate transitions to clarify the relationships among ideas and concepts.

Suggestion: Have students recognize the use of:

- Although
- For example
- Over time

RI.6.1 and RH.6-8.1: Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

Suggestion: Ask students why the state did not go with Marshall's plan.

California Connections: The Great Central Valley's Rise to Power Lesson 1 | page 3 of 4

Marshall's Plan

Robert Marshall believed that the farming and flooding problems in the Central Valley could be solved. Marshall traveled throughout California in the early 1900s. He surveyed much of the land and the natural resources. He studied the rivers and where they flooded. He also analyzed the drier, southern part of the Central Valley. Over many years, Marshall figured out how to permanently protect the Central Valley from floods by sending the extra water from the northern end of the Central Valley to the dry southern areas. With this plan, new farms could be created in the southern end of the Central Valley. However, Marshall's plan would cost a lot of money



close to \$800 million. In the 1920s, this price was outrageous to most people. Because of this, his plan was forgotten.

Doubt, Drought and the

By 1930, life in California was changing rapidly. Drought gripped the Central Valley. It continued for six years. Further, the United States was in an economic depression. Many people had lost their jobs.

People all over the nation were very discouraged. The government looked for ways to help people find jobs and to support industries. Government workers turned their attention to California's Central Valley. They studied Marshall's plan and started asking important questions: What if water was captured and sent to the dry, dusty San Joaquin Valley for irrigation? What if some of it was pumped to cities in the south? What if new dams were constructed to capture water and also to generate electricity? With all of these problems solved, what could the Central Valley become? Edward Hyatt was

California's State Engineer

at the time. Hyatt designed a plan very much like Marshall's His plan was less expensive. too. The Central Valley would have a steady supply of water River flooding in the north would be stopped. Many people would have jobs they would be hired to build the new canals and dams

Taking the Plan to the People

However, if Hyatt's ideas were to become reality, a couple of steps had to be taken.

a state law. Most legislators believed the plan was good for California, but they had to have the citizens' approval Many people did not want the new water system. They worried that northern California would lose too much water. However, most Californians approved of Hyatt's plan and voted to build the dams and canals

The second step was to find the money to carry out the plan. The state could not afford to pay for such an expensive water movement system. What if they asked the federal government for the money? What if they presented the plan to

RI.6.5 and RH.6-8.5:

Analyze how a particular sentence, paragraph. . .fits into the overall structure of a text and contributes to the development of the ideas.

Suggestion: Have students reflect on the headings and discuss if they are appropriate for the text that follows them.

W.6.2c and WHST.6-8.2: Use appropriate transitions to clarify the relationships among ideas and concepts.

Suggestion: Have students recognize the use of:

- The first step
- The second step
- Today

RI.6.7 and RH.6-8.7: Integrate information presented in different media or formats...to develop coherent understanding of a topic or issue.

Suggestion: Refer to the photo and ask what a dam does to the river source above and below it.

RI.6.7 and RH.6-8.7: Integrate information presented in different media or formats...to develop coherent understanding of a topic or issue.

Suggestion: Lead a brief discussion on how does a ball of cotton becomes clothing.

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President Roosevelt? Maybe he would help California California's leaders traveled east to Washington D.C. and talked to the president.

President Roosevelt signed a bill in 1935 to help California carry out Hyatt's plan. The construction plans were soon finished, and workers from all over the United States were hired to work on the Central Valley Project (CVP).

In 1937, workers started building the Contra Costa Canal, which began delivering water in 1940. Friant Dam the first dam to be part of the CVP, was ready in 1944 A year later, Shasta Dam, located on the Sacramento River, was finished. Shasta Dam would become the most important dam in the Central

Valley Project, By 1945, it controlled flooding in the northern Central Valley. In 1951, it began delivering water to the Central Valley. The water from Shasta was used to irrigate over 300,000 acres of farmland. Other water went to cities and towns, wildlife refuges, and industries in

Today, the CVP is one of the world's largest water control and delivery systems. Twenty dams and lakes are connected by five hundred miles of canals that deliver water from the northern part of the state to the southern part of the Central Valley. Eighty percent of this water is used for agriculture.

The World's Greatest Garden

With the new water system. farmland in the Central Valley tripled. Before the dams and canals of the CVP were completed, one million acres in the Central Valley were farmed. Afterwards, three million acres were used to grow crops and raise animals! Because of the CVP, the Central Valley became the "Great Central Valley."

The Great Central Valley is now home to six and one-half million people. Its largest cities are Fresno and Sacra our state capital. The cities of Stockton and Bakersfield are two of the busiest shipping centers in the world, moving agricultural goods from the and out of the state by ship truck, and train.

What may be the world's greatest garden is also one of the most changed areas on Earth. Some of these changes are threatening the future of agriculture in the Valley. Tough decisions about how we use the resources of the Great Central Valley lay ahead as we continue to depend on its natural systems for food and wealth.



Central Valley canal

SL.6.4: Present claims and findings...using pertinent descriptions, facts, and details...

Suggestion: Upon finishing the article, have students take brief notes on key facts and report out to another classmate.

Suggestion: Ask, "What percentage of growth was there after the dams and canals were completed?"

RI.6.2 and RH.6-8.2: Determine a central idea of a text and how it is conveyed through particular details; provide summary of the text distinct from personal opinions or judgments.

Suggestion: Have students review the positive effects of the CVP.

RI.6.7 and RH.6-8.7: Integrate information presented in different media or formats...to develop coherent understanding of a topic or issue.

Suggestion: Have students review photo and express what they are observing in the picture and how it relates to the topic we are reading about. Note that this photo shows how water moves through Central Valley.

Common Core Reference Pages

California Common Core State Standards Descriptions

Language Standards

- L.6.4: Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies.
 - c) Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.

Reading Standards for Informational Text

- RI.6.1: Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
- R1.6.2: Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.
- R1.6.4: Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings. (See grade 6 Language standards 4–6 for additional expectations.) CA
- R1.6.5: Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas. Analyze the use of text features (e.g., graphics, headers, captions) in popular media. CA
- RI.6.7: Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.
- R1.6.8: Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not.

Speaking and Listening Standards

- SL.6.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.
 - c) Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.
 - d) Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.
- SL.6.2: Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.
- SL.6.4: Present claims and findings (e.g., argument, narrative, informative, response to literature presentations), sequencing ideas logically and using pertinent descriptions, facts, and details and nonverbal elements to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation. CA

Writing Standards

- W.6.1: Write arguments to support claims with clear reasons and relevant evidence.
- W.6.2: Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
 - c) Use appropriate transitions to clarify the relationships among ideas and concepts.
 - d) Use precise language and domain-specific vocabulary to inform about or explain the topic.
- W.6.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
- W.6.7: Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.

Common Core Reference Pages

- W.6.9: Draw evidence from literary or informational texts to support analysis, reflection, and research.
- W.6.10: Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Reading Standards for Literacy in History/Social Studies

- RH.6-8.1: Cite specific textual evidence to support analysis of primary and secondary sources.
- RH.6-8.2: Determine the central ideas or information of a primary or secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions.
- RH.6-8.4: Determine the meaning of words and phrases as they are used in a text, including vocabulary specific to domains related to history/social studies.
- RH.6-8.5: Describe how a text presents information (e.g., sequentially, comparatively, causally).
- RH.6-8.7: Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.
- RH.6-8.8: Distinguish among fact, opinion, and reasoned judgment in a text.

Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects

- WHST.6-8.1: Write arguments focused on discipline-specific content.
- WHST.6-8.2: Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.
 - d) Use precise language and domain-specific vocabulary to inform about or explain the topic.
- WHST.6-8.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- WHST.6-8.7: Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
- WHST.6-8.9: Draw evidence from informational texts to support analysis, reflection, and research.
- WHST.6-8.10: Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.